



# Theme Implementation Plan for Imagery Theme

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Department of Agriculture  
Department of the Interior

**Federal Geographic Data Committee (FGDC)**

October 31, 2018



# Imagery Theme FY2018 Implementation Plan Report



## Overview

As part of meeting the requirements under [OMB Circular A-16 Supplemental Guidance](#) and [OMB Circular A-16 Appendix E - NGDA Data Themes, Definitions, and Lead Agencies](#) for NGDA Portfolio Management and NGDA Theme Management, NGDA Themes Leads for a Theme, in coordination with associated NGDA Dataset Managers, have developed Theme Strategic Plans and corresponding implementation plans for each Theme in the NGDA Portfolio. This report provides information on implementing the goals, objectives, and actions outlined in the Theme's Strategic Plan (link below). The report includes information on Theme Personnel (Table 1), National Geospatial Data Asset (NGDA) Datasets associated with the Theme (Table 2), and the human and financial resources needed to manage the Theme (Table 3). Table 4 provides a status update on progress made in the current reporting period toward meeting Theme Strategic Plan goals and objectives. Table 5 provides details on the Theme Implementation Plan.

## Theme Strategic Plan

[https://communities.geoplatform.gov/ngda-imagery/wp-content/uploads/2018/04/Imagery\\_Theme\\_Strategic\\_Plan\\_20160715.pdf](https://communities.geoplatform.gov/ngda-imagery/wp-content/uploads/2018/04/Imagery_Theme_Strategic_Plan_20160715.pdf)

## Theme Personnel

Theme personnel play a vital role in the operation and maintenance of a Theme. They are “individuals who provide interdepartmental leadership and coordination at the NGDA Theme level. They work with component NGDA Dataset Managers to develop standards and provide guidance. The NGDA Theme Lead, or designee, chairs the NGDA Theme's Thematic Committee and manages the annual process of providing NGDA Dataset collaboration and funding recommendations to the FGDC Steering Committee for those NGDA Datasets within their NGDA Theme. Additionally, the NGDA Theme Lead reports to the Executive NGDA Theme Champion and the FGDC Coordination Group on the NGDA Theme's activities and investments (both current and planned).” Table 1 provides a summary of current Theme Personnel followed by Table 2 that lists the NGDA Datasets that comprise the Theme.

Theme Personnel	
<a href="#">Theme Lead (Co-Leads):</a>	John Cullen, Shirley Hall
<a href="#">Theme Lead Agency(ies):</a>	DOI-USGS, USDA-FSA
<a href="#">Executive Theme Champion(s):</a>	Tod Dabolt, DOI; Sue Bussells, USDA
<a href="#">Executive Champion Agency(ies):</a>	DOI, USDA

Table 1. Personnel Involved in Theme Management.

Imagery Theme <a href="#">NGDA Datasets</a>	NGDA Agency
Advanced Spaceborne Thermal Emission and Reflection Radiometer (ASTER)	NASA
Landsat 1-5 Multispectral Scanner: 1972-2013	DOI-USGS
LANDSAT 4-5 Thematic Mapper (1982 - present)	DOI-USGS
Landsat 7 Enhanced Thematic Mapper Plus Scan Line Corrector off: 2003-Present	DOI-USGS
Landsat 8 Operational Land Imager and Thermal Infrared Sensor	DOI-USGS
Moderate Resolution Imaging Spectroradiometer (MODIS) - Aqua	NASA
Moderate Resolution Imaging Spectroradiometer (MODIS) - Terra	NASA
NOAA Coastal Mapping Remote Sensing Data	DOC-NOAA
The National Agriculture Imagery Program (NAIP) Imagery	USDA-FSA
USGS High Resolution Orthoimagery Collection	DOI-USGS

**Table 2. NGDA Datasets within the Theme.**

## Human and Financial Resources Needed for Theme Management

The following table provides an estimate of resources needed for managing this Theme. It includes different activities, the roles that support them, as well as an estimated decimal Full Time Equivalent (FTE) and FTE grade. This estimate does not include the resources required for the agency to develop and maintain the NGDA Dataset(s) that make up the Theme to meet the agency's core mission requirements.

Reporting Period for Human and Financial Resources<sup>1</sup>: 1 October 2017 – 30 September 2018

Description of Theme Management Activities	Role (Theme Lead, co-Theme Lead, NGDA Coordinator, other as specified)	FTE <sup>2</sup>	FTE Grade
NGDA Theme management (e.g., attend meetings, review NGDA documents, develop Theme Strategic Plans, etc.)	FSA Co-Theme Lead	.2	14
NGDA Theme management (e.g., attend meetings, review NGDA documents, develop Theme Strategic Plans, etc.)	USGS Co-Theme Lead	.2	15

**Table 3. Human and Financial Resources Needed for Theme Management.**

## Progress against Goals and Objectives

The following table shows the progress status made toward achieving the Theme's Strategic Plan goals and objectives since the last reporting period. Status categories include 'Not Started' for those activities that have not gotten underway in the reporting period; 'In Progress' for those activities underway which

<sup>1</sup> Reporting period should align with October 1 – September 30 and be submitted by October 31.

<sup>2</sup> A full-time employee was available a maximum of 1952 hours during the inclusive period of October 1 – September 30; assuming a Monday-Friday schedule with 8-hour workdays and not counting Federal Holidays. The FTE was determined by taking actual number of hours worked in support of Theme Management divided by 1952 hours, rounded to the nearest 0.01.

will continue into the next year; 'Complete' for the activities finished, or 'Recurring (completed for the current reporting period).

<b>Summary of Goals and Objectives undertaken during FY2018</b>	<b>Status</b>
<b>Goal 1: Fulfill Agency Imagery Business Requirements</b>	
Objective 1.1. Identify Agency Requirements: Complete a comprehensive assessment of all Federal agency imagery requirements	In Progress
Objective 1.2. Identify Mechanisms to Meet Agency Requirements and Build Effective Partnerships	In Progress
Objective 1.3. Assess Imagery Requirements Fulfillment: Identify gaps in imagery requirements fulfillment, identify potential modifications to meet new needs, and apply "lessons learned" for program improvement	In Progress
Objective 1.4. Funding: Create optimized funding model(s)	Not Started
<b>Goal 2: Facilitate the Availability and Usage of Imagery and Geospatial Data</b>	
Objective 2.1. Support and Collaboration: Create an interagency support network for use by existing and potential imagery programs (including technical, managerial, coordination, and other activities)	In Progress
Objective 2.2. Data-Sharing: Identify Federal government options for licensed and unlicensed imagery and data distribution and access among agencies in an efficient and effective manner	In Progress

**Table 4. Theme Implementation Plan Progress Status**

## Theme Implementation Plan

The following table provides details for achieving Theme Strategic Plan goals and objectives over the multi-year planning period. These include roles and responsibilities, specific actions, milestones, performance indicators and projected completion dates.

<b>Goal 1: Fulfill Agency Business Requirements for Imagery Requirements</b>				
<b>Objective 1.1:</b> Identify Agency Requirements: Complete a comprehensive assessment of all Federal agency imagery requirements				
<b>Agency and/or Stakeholders Involved:</b> NDOP, Other Federal Agencies, FGDC Secretariat				
<b>Anticipated Outcome:</b> Assessment of all federal agency imagery requirements				
<b>Actions</b>	<b>Milestones</b>	<b>Performance Indicators</b>	<b>Action Responsibility</b>	<b>Projected Completion Date</b>
1.1.1 Identify department-wide imagery contacts from FGDC agencies to participate in NDOP or assist in development of strategic plan	Identification of departmental contacts	Complied list of departmental contacts	Imagery Theme Leads and NDOP Leadership in concert with FGDC Secretariat	FY2019
1.1.2 Evaluate individual agency and program land imaging user requirements	Complete initial investigation by end of CY2018, continue to revise and reassess periodically	Identified /compiled initial requirements for civil agencies and participating states	TBD based on type of requirement collection involved. Some initial work done FY16-18 by FSA and USGS	FY2019
1.1.3 Baseline major imagery requirements at State level	Using 1.1.2, assess and document findings	Initial documentation completed	NDOP Members with assistance from NAIP agencies and USGS-NLI Program Office	FY2019
<b>Agency and/or Stakeholder</b>	<b>Activity through FY2018</b>			
Imagery Theme Leads, NDOP	2018 NDOP Spring meeting held at USGS in Reston, VA, May 22-24, 2018			
Imagery Theme Leads, NDOP, NAIP	Monthly participation in NAIP FY2018 requirement meetings			
Imagery Theme Leads, NDOP	Hosted National Imagery Summit at USGS in Reston, VA, Sept 20-21, 2018			

**Objective 1.2:** Identify Mechanisms to Meet Agency Requirements and Build Effective Partnerships  
**Agency and/or Stakeholders Involved:** NDOP and Collection Programs of NGDA Agencies  
**Anticipated Outcome:** Use the identified mechanisms to review partner requirements and determine how to meet the greatest needs at the lowest cost

Actions	Milestones	Performance Indicators	Action Responsibility	Projected Completion Date
1.2.1 Identify mechanisms for flexible licensing options	NDOP Technical and Program Subcommittee review of successful licensing options currently in place – compile information available about products and services	Licensing options identified	NDOP	FY2019
1.2.2 Identify mechanisms for streamlined and effective contracting	Identify collection contracting options potentially impacted by GSA Schedule 70 activity and NAIP 2018 contract development	Best practice contract options are identified and documented	NDOP	FY2019
1.2.3 Identify mechanisms for enhanced cost-effective storage and distribution	Build framework for meeting FGDC imagery needs	Completion of National Imagery Data Maintenance Plan	NDOP	FY2020
Agency and/or Stakeholder		Activity through FY2018		
Imagery Theme Leads, NDOP		2018 NDOP Spring meeting held at USGS in Reston, VA, May 22-24, 2018		
Imagery Theme Leads, NDOP, NAIP		Monthly participation in NAIP FY2018 requirement meetings		
Imagery Theme Leads, NDOP		Hosted National Imagery Summit at USGS in Reston, VA, Sept 20-21, 2018		

**Objective 1.3:** Assess Imagery Requirements Fulfillment: Identify gaps in imagery requirements fulfillment, identify potential modifications to meet new needs, and apply “lessons learned” for program improvement

**Agency and/or Stakeholders Involved:** NDOP and Collection Programs of NGDA Agencies

**Anticipated Outcome:** Identify gaps in imagery requirements fulfillment, identify potential modifications to meet new needs, and apply “lessons learned” for program improvement

Actions	Milestones	Performance Indicators	Action Responsibility	Projected Completion Date
1.3.1 Annually assess effectiveness of the imagery suite in meeting mission needs according to best practices	User survey collection complete	Submission to FGDC annual report	NDOP and Collection Programs of NGDA Agencies	FY2019
1.3.2 Compile gap assessment documentation	Recommendations or actions taken based on gaps identified in assessment of program effectiveness, including root cause analysis	Annual submission to FGDC	NDOP and Collection Programs of NGDA Agencies	FY2019
1.3.3 Identify required actions for subsequent year contracting and remedies to address shortfalls	Identify subsequent year action plans	Document Changes and prioritize recommended improvements	NDOP and Collection Programs of NGDA Agencies	FY2019

1.3.4 Establish a mechanism to record and share collection strategies and requirements for routine and emergency imagery to remove redundancy and enhance effectiveness	Identify what is being collected, responsible parties and actions, including requirements for routine (e.g. NAIP), unique (e.g., shoreline) and emergency imagery, adding routine imagery in marketplace following acquisition; develop documentation to identify process flows for handling various scenarios to optimize metadata profile creation	List of documents, best practices, process flows	NDOP and Collection Programs of NGDA Agencies	FY2019
<b>Agency and/or Stakeholder</b>	<b>Activity through FY2018</b>			
Imagery Theme Leads, NDOP	2018 NDOP Spring meeting held at USGS in Reston, VA, May 22-24, 2018			
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<b>Objective 1.4:</b> Funding: Create optimized funding model(s) <b>Agency and/or Stakeholders Involved:</b> NDOP and Collection Programs of NGDA Agencies <b>Anticipated Outcome:</b> Stabilization of Funding				
Actions	Milestones	Performance Indicators	Action Responsibility	Projected Completion Date
1.4.1 Identify current imagery funding sources and explore alternate funding sources and partnership models	Working session (summit) with identified representatives to have a discussion on sources of funding	Summit Output Document	NDOP and Collection Programs of NGDA Agencies	FY2019
1.4.2 Identify the values and benefits of having non-lapsing funds and establishing MOAs for effective inter-agency collaboration and transfer of funds (GAO 13-94)	Tie to 1.4.1, and documentation of usefulness of non-lapsing funds (pros/cons)	Summit Output Document	NDOP and Collection Programs of NGDA Agencies	FY2019
<b>Agency and/or Stakeholder</b>	<b>Activity through FY2018</b>			
Imagery Theme Leads, NDOP	2018 NDOP Spring meeting held at USGS in Reston, VA, May 22-24, 2018			
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Imagery Theme Leads, NDOP	Hosted National Imagery Summit at USGS in Reston, VA, Sept 20-21, 2018			

<b>Goal 2: Facilitate the Availability and Use of Imagery and Geospatial Data</b>				
<b>Objective 2.1:</b> Support and Collaboration: Create an interagency support network for use by existing and potential imagery programs (including technical, managerial, coordination, and other activities) <b>Agency and/or Stakeholders Involved:</b> Theme Leads and NGDA Collection Agencies <b>Anticipated Outcome:</b> Create an inter-agency support network for use by existing and potential imagery programs – may include technical, managerial, coordination, and other activities				
<b>Actions</b>	<b>Milestones</b>	<b>Performance Indicators</b>	<b>Action Responsibility</b>	<b>Projected Completion Date</b>
2.1.1 Begin development of national plan for contract and supporting relationships among federal and non-federal partners	Convene National Imagery Summit of Federal, State and regional agencies to discuss national plan for contract and supporting relationships among federal and non-federal partners	Compile recommendations for next steps from National Imagery Summit presentations and discussions	Theme Leads, NGDA Collection Agencies	FY2018
2.1.2 Create database of state agency representatives to support development of national plan	Distribute database of state agency representatives for review by Federal, State and regional agencies	Feedback from Federal, State and regional agency review	Theme Leads, NGDA Collection Agencies, including USGS National Land Imaging Program	FY2019
2.1.3 Identify Federal, State and regional agency roles and missions in national plan	Establish ongoing process for imagery management and technical support to users	Feedback on proposed process from Federal, State and regional agency review	Imagery Theme Leads, NGDA Collection Agencies	FY2020
<b>Agency and/or Stakeholder</b>	<b>Activity during FY2018</b>			
Imagery Theme Leads, NDOP	2018 NDOP Spring meeting held at USGS in Reston, VA, May 22-24, 2018			
Imagery Theme Leads, NDOP, NAIP	Monthly participation in NAIP FY2018 requirement meetings			
Imagery Theme Leads, NDOP	Hosted National Imagery Summit at USGS in Reston, VA, Sept 20-21, 2018			

<b>Objective 2.2:</b> Data-Sharing: Identify Federal government options for licensed and unlicensed imagery and data distribution and access among agencies in an efficient and effective manner <b>Agency and/or Stakeholders Involved:</b> Imagery Theme Leads, NGDA Collection Agencies <b>Anticipated Outcome:</b> Lead and participate in the development and coordination of national and international standards applicable to the imagery geospatial community				
Actions	Milestones	Performance Indicators	Action Responsibility	Projected Completion Date
2.2.1 Identify mechanisms for expanding imagery and geospatial data distribution rights	Discuss proposed mechanisms at National Imagery Summit, NDOP meetings and other fora	Broad agreement of proposed mechanisms and identification of implementation procedures	Imagery Theme Leads, NGDA Collection Agencies	FY 2020
2.2.2 Identify mechanisms for cost-effective distribution of new and archive imagery	Conduct surveys to identify agency storage needs and preferred data distribution methods	Documentation of cost-effective methodologies	Imagery Theme Leads, NGDA Collection Agencies	FY 2020
Agency and/or Stakeholder	Activity during FY2018			
Imagery Theme Leads, NDOP	2018 NDOP Spring meeting held at USGS in Reston, VA, May 22-24, 2018			
Imagery Theme Leads, NDOP, NAIP	Monthly participation in NAIP FY2018 requirement meetings			
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**Table 5. Theme Implementation Plan.**